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Summary

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(57) [Abstract]
[Technical problem] the game machine which gave game nature to the display itself a pattern is in sight, and increased the interest of a game -- providing .
[Means for Solution] It is a pachislot machine. The position of the right grant line L6 in the glass 43 of a display window 8 is clouded, and it can cover. Moreover, while determining whether make the line of L6 into an effective line by the lottery in MAX bed specification, the above-mentioned cover is canceled to predetermined timing.

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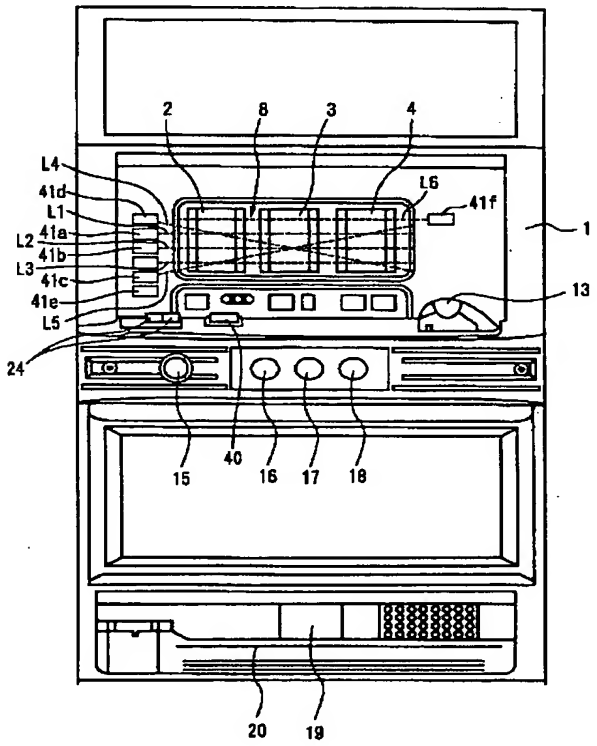

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CLAIMS

[Claim(s)]
[Claim 1] If it is judged as a game start, while indicating two or more pattern trains by circulation to a display In the game machine with which it is judged whether a predetermined right is given based on the halt pattern which the above-mentioned circulation display is turned off and shown to the above-mentioned display by operation of a game person's pattern halt section after the halt concerned The game machine characterized by covering a part of pattern [at least] displayed on the above-mentioned display from a game person, or exposing establishing a possible cover means arbitrarily.
[Claim 2] It has the above-mentioned pattern train which indicates by circulation two or more sets. to the above-mentioned display While having a size in which two or more pattern [every] displays are possible along the circulation direction, respectively about each above-mentioned pattern train It has a selection means to have two or more right grant lines which choose and come to tie the pattern display position of 1 per display position of each pattern train in a display, and to choose 1 of two or more of the right grant lines, or two or more lines as an effective line. In the game machine with which it is judged whether the combination of the halt pattern located in a line along with the effective line chosen with the above-mentioned selection means gives a predetermined right the above-mentioned cover means The game machine indicated to the claim 1 characterized by the ability to cover 1 or two or more right grant line positions among two or more above-mentioned right grant lines.
[Claim 3] The game machine indicated to the claim 1 or claim 2 characterized by determining the timing covered with the above-mentioned cover means by the lottery.
[Claim 4] The above-mentioned cover means is the game machine indicated to the claim 1 or claim 2 characterized by making the target portion into a cover state at

the time of a game start.
[Claim 5] One of the right grants which the existence of right grant is determined by the lottery and determined by this lottery until the list of the halt pattern located in a line along with one of effective lines serves as combination of a specific hit pattern It is the game machine indicated to the claim 4 characterized by the above-mentioned cover means making the target portion an exposure state in a bonus right grant state in the game machine which is in the bonus right grant state where the right grant state concerned is carried over by the next game at the time of a game start.
[Claim 6] The game machine indicated by either the claim 1 characterized by determining the timing which changes cover with the above-mentioned cover means into an exposure state by the lottery - the claim 5.
[Claim 7] The game machine indicated to either the claim 2 characterized by determining the timing of which it notifies by the lottery in the game machine equipped with a notice means to notify of whether each above-mentioned right grant line was chosen as an effective line - the claim 6.
[Claim 8] The above-mentioned selection means is the game machine indicated to either the claim 2 characterized by determining an effective line by the lottery - the claim 7.
[Claim 9] The above-mentioned selection means is the game machine indicated to either the claim 2 characterized by determining the number of an effective line by the lottery - the claim 8.

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DETAILED DESCRIPTION

[Detailed Description of the Invention]
[0001]
[The technical field to which invention belongs] A circulation indication of game machines, i.e., two or more pattern trains, such as a pachislot machine, is given at a

display, and, as for this invention, a halt of the circulation display is related with the game machine performed by operation of a game person's pattern halt section.
[0002]
[Description of the Prior Art] In a pachislot machine, it has a stop button for a rotation halt for every rotation reel of that with three rotation reels by which two or more pattern trains were arranged in the periphery side. The display window of only the size which can display the pattern train of each rotation reel 3 coma (a part for a pattern) every, respectively is prepared in the front face of the three above-mentioned rotation reels. By this, after three rotation rotation reels have stopped, the halt pattern for vertical 3 coma x width 3 coma has become as [display / pattern] to the above-mentioned display window.
[0003] moreover, about the pattern display position of the vertical 3 coma x width 3 above-mentioned coma in a display window With the number of game medals to which two or more lists (it is also hereafter called a right grant line) which come to tie the pattern display position chosen one place at a time are beforehand determined towards the longitudinal direction or the direction of slant, and were supplied for every rotation reel One line or two lines or more are chosen from two or more right grant lines concerned as an effective line. At this time, it indicates the lamp corresponding to the selected line lit up, and chosen as the effective line.
[0004] After this, three rotation reels start rotation simultaneously and a circulation indication of the pattern train (two or more patterns) arranged by each rotation reel to the display window is given, respectively noting that a game (game) will be started, if a start lever is operated. Then, if the depression of the stop button is carried out, halt control of a corresponding rotation reel will be performed, and where the train of three halt patterns is displayed to a display window, it will stop. This halt processing is separately performed about three rotation reels.
[0005] When the list of three patterns which met the effective line of one of the above among vertical 3 pattern (three coma) x width 3 patterns (three coma) which are in sight from a display window is judged to be the pattern pattern of right grant, according to the pattern pattern of the right grant concerned, right grant of expenditure of a game medal, a re-game, etc. is performed. Here, in the common pachislot machine, usually, although the above-mentioned right grant line is five of three width and two slant, in recently, the game machine called seven lines and multi-line machine which it has eight lines in a right grant line has also appeared.
[0006]
[Problem(s) to be Solved by the Invention] However, the above-mentioned multi-line machine leaves the size of a display window intact, a display window is enlarged, the number of right grant lines is only increased [a right grant line is added forcibly, or], and game nature has seldom changed. this invention was made paying attention to the above points, and makes it the technical problem to offer the game machine which can improve the game nature to a right grant line.
[0007]

[Means for Solving the Problem] In order to solve the above-mentioned technical problem, invention indicated to the claim 1 among this inventions If it is judged as a game start, while indicating two or more pattern trains by circulation to a display In the game machine with which it is judged whether a predetermined right is given based on the halt pattern which the above-mentioned circulation display is turned off and shown to the above-mentioned display by operation of a game person's pattern halt section after the halt concerned Covering a part of pattern [at least] displayed on the above-mentioned display from a game person, or exposing is characterized by establishing a possible cover means arbitrarily.

[0008] Invention indicated to the claim 2 has two or more sets of above-mentioned pattern trains which indicate by circulation to the composition indicated to the claim 1. next, to the above-mentioned display While having a size in which two or more pattern [every] displays are possible along the circulation direction, respectively about each above-mentioned pattern train It has a selection means to have two or more right grant lines which choose and come to tie the pattern display position of 1 per display position of each pattern train in a display, and to choose 1 of two or more of the right grant lines, or two or more lines as an effective line. In the game machine with which it is judged whether the combination of the halt pattern located in a line along with the effective line chosen with the above-mentioned selection means gives a predetermined right the above-mentioned cover means It is characterized by the ability to cover 1 or two or more right grant line positions among two or more above-mentioned right grant lines.

[0009] Next, invention indicated to the claim 3 is characterized by determining the timing covered with the above-mentioned cover means by the lottery to the composition indicated to the claim 1 or the claim 2. Next, it is characterized by the above-mentioned cover means making the target portion a cover state at the time of a game start to the composition which indicated invention indicated to the claim 4 to the claim 1 or the claim 2.

[0010] Next, invention indicated to the claim 5 receives the composition indicated to the claim 4. One of the right grants which the existence of right grant is determined by the lottery and determined by this lottery until the list of the halt pattern located in a line along with one of effective lines serves as combination of a specific hit pattern In the game machine which is in the bonus right grant state where the right grant state concerned is carried over by the next game, the above-mentioned cover means is characterized by making the target portion into an exposure state at the time of a game start in a bonus right grant state.

[0011] Next, invention indicated to the claim 6 is characterized by determining the timing which changes cover with the above-mentioned cover means into an exposure state by the lottery to the composition indicated by either the claim 1 - the claim 5. Next, invention indicated to the claim 7 is characterized by determining the timing of which it notifies by the lottery to the composition indicated to either the claim 2 - the claim 6 in the game machine equipped with a notice means to

notify of whether each above-mentioned right grant line was chosen as an effective line.

[0012] Next, the above-mentioned selection means is characterized by determining an effective line by the lottery to the composition which indicated invention indicated to the claim 8 to either the claim 2 - the claim 7. Next, the above-mentioned selection means is characterized by determining the number of an effective line by the lottery to the composition which indicated invention indicated to the claim 9 to either the claim 2 - the claim 8.

[0013]

[Embodiments of the Invention] Next, it explains, referring to a drawing about the operation form of this invention. In addition, this operation form explains a pachislot machine to an example. Drawing 1 is the front view of the pachislot machine of this operation form. Moreover, drawing 2 is drawing showing the composition of a game control section.

[0014] First, explanation of composition arranges three rotation reels 2, 3, and 4 behind the front panel 1 at the same axle, as shown in drawing 1 . As shown in drawing 3 , along with the circumferencial direction, the array of two or more pattern trains is individually displayed on the periphery side of each rotation reels 2, 3, and 4, respectively. While the rotation drive of each of those rotation reels 2, 3, and 4 is carried out by the individual step motors 5, 6, and 7, a part of pattern train (with the list of two or more patterns and this operation gestalt, it considers as four patterns) prepared in the periphery side is displayed on the display window 8 prepared in the front panel 1 (appearance).

[0015] The display window 8 has become the size which can display the list of three patterns on a longitudinal direction (the direction of a list of the rotation reels 2, 3, and 4), i.e., the size which has a 4x3=12 piece pattern display position in total, about the train of four patterns lengthwise (the circulation direction). Glass 43 is arranged at the display window 8. As shown in drawing 4 , the thing to which the glass 43 of a mass 43a portion which is virtually divided into mass 43a (pattern display position) of the shape of a grid of three four length and width, and corresponds by each thing for which current is passed per mass 43a polarizes and shades and for which it carries out (it blooms cloudy) and a back pattern is hidden is possible for this glass 43. A cover means is constituted by this. The size of each mass 43a is only a size in which the pattern of a piece hides. In addition, although it is illustrated in order to make intelligible the line (line which divides each mass 43a) of the shape of a grid in drawing 4 etc., it is not displayed in fact.

[0016] Moreover, four width and the right grant lines L1-L6 of two slant are displayed on the above-mentioned display window 8, and all or a part of right grant lines L1-L6 of the above-mentioned plurality turn into an effective line according to the medal which the game person threw in in advance of the game start. Moreover, when it has the BET switch 24 and the credit of the medal is carried out, it replaces with an injection of the medal to the medal injection section 13, and will be in a state

equivalent to a medal injection by operation of the BET switch 24. A sign 40 is a MAX bed switch.

[0017] moreover, corresponding right grant line L1- it has the display lamps 41a-41f which show whether the right grant line concerned is an effective line for every L6 As for each display lamps 41a-41f, control is performed by the lamp operation section 42, and this lamp operation section 42 performs lighting and putting out lights of each lamps 41a-41f based on the signal from the below-mentioned game control section 9.

[0018] Moreover, as for each motors 5, 6, and 7 turning around each above-mentioned rotation reels 2, 3, and 4, control of a rotation drive is performed by the instructions from the game control section 9. Moreover, it has the position detection sensors 10, 11, and 12 for detecting a rotation position (pattern currently displayed on the display window 8), such as a phot sensor, for every [each rotation reels 2 and 3 and] four, and each position detection sensors 10, 11, and 12 output a detecting signal to the game control section 9.

[0019] Moreover, while a game person equips the above-mentioned front panel 1 with the medal injection section 13 which throws in a medal, the medal detection sensor 14 which detects an injection of a medal is formed in the path in the medal injection section 13 concerned. This medal detection sensor 14 outputs a detection signal to the game control section 9. Moreover, the start lever 15 for making all of rotation of each above-mentioned rotation reels 2, 3, and 4 start is formed in a front panel 1, and the start signal by the start lever 15 being operated is outputted to the game control section 9.

[0020] Moreover, if it has three stop buttons 16, 17, and 18 which constitute directions, i.e., the pattern halt section, for a halt of each rotation reels 2, 3, and 4 and these stop buttons 16, 17, and 18 are pushed, the stop signal of the corresponding rotation reels 2, 3, and 4 will be outputted to the game control section 9. Here, among drawing 1 , a sign 19 is the expenditure mouth of a medal and a predetermined medal pays it out of the medal expenditure machine 30 to the expenditure mouth 19 concerned by the instructions from the game control section 9. A sign 20 is the saucer of a medal.

[0021] Next, the composition of the game control section 9 is explained. Drawing 2 is the block diagram having shown the principal part of the game control section 9. The game control section 9 is equipped with random-number-generation means 9A, sampling means 9B, start start means 9C, pattern train determination means 9D, number determination means of effective lines 9E, notice timing determination means 9F, cover release timing determination means 9G, halt control-means 9H, the roll control meanses 9J, 9K, and 9L of each above-mentioned motors 5, 6, and 7, cover control-means 9M, 9 Ns of ramp-control meanses, and expenditure control-means 9P.

[0022] Here, in ROM which is not illustrated in the game control section 9, the right grant probability table 45 and the number probability effective line notice timing

probability table [cover release timing probability] 46, 47, and 48 of effective lines are stored. The right grant probability table 45 is a table of the information about the combination of the probability of the right grant of the role of each in the internal lottery for the existence of right grant, and a halt pattern.

[0023] The number probability table 46 of effective lines is a table which determined the probability of distribution of whether an effective line is made into six lines (the line of a cover position is also effective) like drawing 4 by the ability of a random number value distributing so that it may become probability as shown in the following table 1, or to consider as five lines like drawing 5 and which was set up for every role. The probability in Table 1 and in a parenthesis is the probability in a bonus right grant state (a bonus flag turns on).

[0024] As shown in Table 1, when a bonus (a big bonus or regular bonus) is chosen by the lottery of a right grant sake with this operation gestalt While a random number value can distribute so that an effective line may turn into six lines by high probability (70% or more of probability) When chosen except a bonus, probability is set up so that it may become five lines (the line of a shield is invalid) by high probability (98% or more of probability) and a random number value can distribute.

[0025]

[Table 1]

当選役	5ラインに振り分け＝遮蔽ライン無効	6ラインに振り分け＝遮蔽ライン有効
BIG	20／100 (50／100)	80／100 (50／100)
REG	30／100 (50／100)	70／100 (50／100)
小役	85／100 (20／100)	15／100 (80／100)
リプレイ	90／100 (20／100)	10／100 (80／100)
はずれ	98／100 (10／100)	2／100 (90／100)

[0026] Moreover, the effective line notice timing probability table 47 is a probability table for determining the timing which the number of effective lines notifies of five lines or six lines, for example, the random number value has distributed it so that it may become probability as shown in Table 2. The probability in Table 2 and in a parenthesis is the probability in a bonus right grant state (a bonus flag turns on).

[0027] the case where a bonus is chosen with this operation gestalt as shown in Table 2 — all the rotation reels 2, 3, and 4 — the [under rotation or] — a notice is performed for 3 rotation reel 4 by high probability at the time of a halt namely, notice timing — all the rotation reels 2, 3, and 4 — the [under rotation or] — when it is 3 rotation reel 4 at the halt time, the probability of bonus selection is high

[0028]

[Table 2]

当選役	全ﾘｰﾙ回転中	第1ﾘｰﾙ停止後	第2ﾘｰﾙ停止後	第3ﾘｰﾙ停止後
BIGﾎﾞｰﾅｽ	30/100(20/100)	10/100(10/100)	20/100(20/100)	40/100(50/100)
REGﾎﾞｰﾅｽ	20/100(15/100)	15/100(15/100)	20/100(20/100)	45/100(50/100)
小役	5/100(60/100)	20/100(5/100)	65/100(20/100)	5/100(15/100)
ﾘﾌﾟﾚｲ	5/100(60/100)	50/100(5/100)	30/100(20/100)	5/100(15/100)
はずれ	2/100(40/100)	80/100(20/100)	15/100(10/100)	3/100(30/100)

[0029] Moreover, the cover release timing probability table 48 is a table showing the probability of the open timing of cover, for example, the random number value has distributed it so that it may become probability as shown in Table 3. The probability in Table 3 and in a parenthesis is the probability in a bonus right grant state (a bonus flag turns on).

[0030]

[Table 3]

当選役	全ﾘｰﾙ回転中	第1ﾘｰﾙ停止後	第2ﾘｰﾙ停止後	第3ﾘｰﾙ停止後
BIGﾎﾞｰﾅｽ	30/100(20/100)	10/100(10/100)	20/100(20/100)	40/100(50/100)
REGﾎﾞｰﾅｽ	20/100(15/100)	15/100(15/100)	20/100(20/100)	45/100(50/100)
小役	5/100(60/100)	5/100(5/100)	20/100(20/100)	3/100(15/100)
ﾘﾌﾟﾚｲ	1/100(60/100)	5/100(5/100)	5/100(20/100)	1/100(15/100)
はずれ	0/100(40/100)	1/100(20/100)	1/100(10/100)	1/100(30/100)

[0031] With this operation gestalt, as shown in Table 3, except when a bonus is chosen, cover is almost canceled (exposure). However, when the list (winning a prize) of the halt pattern of right grants, such as a role of small, is in the effective line L6 of a cover position, cover is compulsorily canceled like the after-mentioned. Next, processing of each meanses 9A-9P of the game control section 9 is explained.

[0032] ** [random-number-generation means 9A's input of an active signal / generate / a random number / A] From the random number which the above-mentioned random-number-generation means 9A generated, sampling means 9B samples one random number value, and outputs the sampled random number value. Start start means 9C is equipped with medal processing section 9calcium and start processing section 9Cb.

[0033] As shown in drawing 6 , it will be in a standby state until it is first judged with there having been an injection of the medal to the medal injection section 13 in Step S10 based on the signal from the medal detection sensor 14, or until medal processing section 9calcium has an input signal from the BET switch 24, and if it judges with there having been an injection of a medal etc., it will shift to Step S12.

[0034] At Step S12, a signal is outputted to 9 Ns of ramp-control meanses, and processing is ended so that the validation lamps 41a-41e which output an active signal to the above-mentioned random-number-generation means 9A, require

**********, and correspond at Step S14 continuously may light up. However, the light is not switched on 6th lamp 41f corresponding to a cover position at this time. Moreover, start processing section 9Cb will shift to Step S102, if it will be in a standby state and a start signal is first inputted at Step S100 until the start signal generated by operation of the start lever 15 is inputted as shown in drawing 7 .

[0035] At Step S102, an active signal is outputted to sampling means 9B, the random number value and active signal which were continuously acquired the random number value and acquired at Step S104 from this sampling means 9B are outputted to pattern train determination means 9D, and it shifts to Step S106. At Step S106, after supplying rotation drive instructions to three roll control meanses 9J, 9K, and 9L, it shifts to Step S108. By this, three rotation reels 2, 3, and 4 start rotation altogether.

[0036] At Step S108, processing is returned, after shifting to Step S112 and outputting the release signal of cover to cover control-means 9M, when it is judged whether it is a bonus right grant state and it judges with a bonus right grant state based on a bonus flag. On the other hand, processing is ended, after shifting to Step S110 and outputting a cover signal to cover control-means 9M at Step S108, when it judges with it not being in a bonus right grant state.

[0037] if the cover state is canceled by the last game during bonus formation although it will be in the introduction cover state of a game in principle, even if cover is canceled by the last game by this -- as it is -- a release state and a bird clapper -- ** -- it becomes Next, it judges the combination of the pattern train corresponding to a random number value, determines the pattern signal corresponding to the pattern combination concerned, and outputs this pattern signal to halt control-means 9H while pattern train determination means 9D will compare and use the inputted random number value as the right grant probability table 45, will judge the existence of right grant and will set up the flag according to the judgment, if an active signal is inputted from a start start means. Then, an active signal is outputted to number determination means of effective lines 9E.

[0038] Here, as a flag according to the existence of right grant, it hits with a blank flag, there is a flag, and it is classified into a bonus game, the role of small, and replay as a kind of hit. A bonus game can carry over a hit flag in subsequent games (game) (the state where hit until it arranged the bonus pattern, and the flag (bonus flag) stood is continued). In addition, there are two kinds of bonus games, a big bonus and a regular bonus. On the other hand, the role of small cannot carry over a hit flag in the following game (game). Generally in the case of a bonus game, a game person can gain a lot of medals compared with the role of small. Moreover, replay permits the operation of a start lever again and is taken as a re-game state.

[0039] Next, number determination means of effective lines 9E performs processing as shown in drawing 8 . First, if it will be in a standby state and the active signal concerned is inputted at Step S200 until it inputs an active signal from pattern train determination means 9D, it will shift to Step S202. At Step S202, when it judges

whether it is MAX bed specification (three-sheet credit) and judges with it not being MAX bed specification, it shifts to Step S216. On the other hand, when it judges with MAX bed specification at Step S202, it shifts to Step S204.

[0040] At Step S204, with reference to the flag (a blank flag or hit flag) according to the existence of right grant, the table data used in the number probability table 46 of effective lines based on the role of success in an election according to the internal lottery are determined, and it shifts to Step S206. At Step S206, an active signal is outputted to random-number-generation means 9A, a random number value is acquired from sampling means 9B, and it shifts to Step S208.

[0041] At Step S208, it checks to the table data which determined the acquired random number value, the number of effective lines is determined, and it shifts to Step S210. At Step S210, the determined number of effective lines judges whether it is 6, and if the number of effective lines which shifted to Step S214 and was determined as ON in LIN6-FLG when the determined number of effective lines was 6 is 5, after shifting to Step S212 and turning OFF the LIN6-FLG concerned, it will shift to Step S216.

[0042] At Step S216, an active signal is outputted to notice timing determination means 9F, and processing is ended. Next, notice timing determination means 9F perform processing as shown in drawing 9 . First, if it will be in a standby state and an active signal is inputted at Step S300 until it inputs an active signal, it will shift to Step S302.

[0043] At Step S302, when it judges whether it is MAX bed specification (three-sheet credit) and judges with it not being MAX bed specification, it shifts to Step S310. On the other hand, when it judges with MAX bed specification at Step S302, it shifts to Step S304. At Step S304, with reference to the flag (a blank flag or hit flag) according to the existence of right grant, the table data used in the effective line notice timing probability table 47 based on the role of success in an election according to the internal lottery are determined, and it shifts to Step S306.

[0044] At Step S306, an active signal is outputted to random-number-generation means 9A, a random number value is acquired from sampling means 9B, and it shifts to Step S308. Check to the table data which determined the acquired random number value at Step S308, and notice timing is determined. If it is [all rotation reel 2 and 3 and 4] under rotation, to TELL-NO "1" If it is after a halt of the 1st rotation reel 2, if it is after a halt of the 2nd rotation reel 3, "2" to TELL-NO at TELL-NO "3" If it is after a halt of the 3rd rotation reel 4, it will substitute "4" for TELL-NO, and in having no notice, it will substitute "0" for TELL-NO, and will shift to Step S310.

[0045] At Step S310, processing is ended, after outputting an active signal to cover release timing determination means 9G. Next, in cover release timing determination means 9G, processing as shown in drawing 10 is performed. That is, if it will be in a standby state and an active signal is inputted at Step S400 until an active signal inputs, it will shift to Step S402.

[0046] At Step S402, with reference to the flag (a blank flag or hit flag) according to the existence of right grant, the table data used in a cover release timing probability table based on the role of success in an election according to the internal lottery are determined, and it shifts to Step S404. At Step S404, an active signal is outputted to random-number-generation means 9A, a random number value is acquired from sampling means 9B, and it shifts to Step S406.
[0047] Check to the table data which determined the acquired random number value at Step S406, and notice timing is determined. If it is [all rotation reel 2 and 3 and 4] under rotation, to OPEN-NO "1" If it is after a halt of the 1st rotation reel 2, if it is after a halt of the 2nd rotation reel 3, "2" to OPEN-NO at OPEN-NO "3" If it is after a halt of the 3rd rotation reel 4, it will substitute "4" for OPEN-NO, and in having no notice, it will substitute "0" for OPEN-NO, and will shift to Step S408.
[0048] At Step S408, it is judged for TELL-NO whether it is "1", if TELL-NO is "1", it will shift to Step S410, and if it is not "1", it will shift to Step S412. At Step S410, the instructions which turn on lamp 41f of L6 are outputted to 9 Ns of ramp-control meanses, and it shifts to Step S412. At Step S412, if it is judged for OPEN-NO whether it is "1" and OPEN-NO judges with "1", it will shift to Step S414, and if it is not "1", it will shift to Step S416.
[0049] At Step S414, after outputting a release signal to cover control-means 9M, it shifts to Step S416. At Step S416, an active signal is outputted to halt control-means 9H, and processing is ended. It carries out. Next, in halt control-means 9H, an input of the stop signal by either of the stop buttons 16, 17, and 18 being pushed if an active signal is inputted performs halt control of each rotation reels 2, 3, and 4 based on the timing (position of the rotation reels 2, 3, and 4 which counter a display window 8), the above-mentioned flag (a hit flag, blank flag), and a pattern signal. That is, when it is a hit, it will draw, if it is within the limits which a hit pattern can draw, and controls, and in the case of a blank, control to which a pattern is not equal is performed.
[0050] the halt control-means 9H are main -- the 1- of halt control-section 9Ha, and each rotation reels 2 and 3 and 4 correspondence -- the 3rd -- it has halt control-section 9Hb, 9Hc, and 9Hd main -- halt control-section 9Ha -- the 1st - the 3rd halt control section 9 -- while calling Hb, 9Hc, and 9Hd, when it judges with three rotation reels 2, 3, and 4 having been in the final idle state altogether, an active signal is outputted to expenditure control-means 9P
[0051] Moreover, the 1st halt control section is the processing section which processes halt control of the 1st rotation reel 2, the 2nd halt control section is the processing section which processes halt control of the 2nd rotation reel 3, and the 3rd halt control section is the processing section which processes halt control of the 3rd rotation reel 4. here -- the 1- the 3rd -- since each processing of halt control-section 9Hb, 9Hc, and 9Hd is fundamentally the same -- the below-mentioned explanation -- the 1st -- only processing of halt control-section 9Hb is explained in addition -- although it is explaining as the three independent processing

sections in order to make it intelligible — the 1- the 3rd — it is not necessary to necessarily have about halt control-section 9Hb(s), 9Hc(s), and all the 9Hd(s) If it judges, only the one processing section will be [the halt control about which rotation reels 2, 3, and 4 it is in main halt control-section 9Ha, and].

[0052] Next, it explains, referring to drawing 11 about processing of the above-mentioned main halt control-section 9Ha. First, in Step S500, after initializing various counters etc., it shifts to Step S202. At Step S502, while changing into the standby state until either of three stop buttons 16, 17, and 18 was pushed, when it judged whether three corresponding stop buttons 16, 17, and 18 were pushed, and it is judged with either of the stop buttons 16, 17, and 18 having been pushed, it shifts to Step S504.

[0053] At Step S504, if the pushed stop button judges whether it is the 1st stop button 16 and judges with the 1st stop button 16 having been pushed, it shifts to Step S508, and in not judging with the 1st stop button 16 having been pushed, it will shift to Step S506. If it judges with having shifted to Step S510, the pushed stop button having judged whether it was the 2nd stop button 17, having got it blocked when not judging with the 2nd stop button 17 having been pushed, when judging with the 2nd stop button 17 having been pushed, and the 3rd stop button 18 having been pushed at Step S506, it will shift to Step S512.

[0054] Step S508 -- the 1st — halt control-section 9Hb — calling — this -- the 1st — processing of halt control-section 9Hb — an end, the [i.e.,], — if 1 rotation reel 2 stops, it will shift to Step S514 At Step S514, after judging whether TELL-NO is "2" Got blocked and notifies of an effective line after a halt of the 1st rotation reel 2, shifting to Step S516 if it judges [notifying and], and outputting lighting instructions of lamp 41f to 9 Ns of ramp-control meanses, it shifts to Step S518. On the other hand, when it judges [not notifying at Step S514 and], it shifts to Step S518.

[0055] At Step S518, when OPEN-NO is "2" Got blocked, it is judged whether it is canceling cover of a cover position after a halt of the 1st rotation reel 2 (it is made visible) and it judges with canceling cover, after shifting to Step S520 and outputting a release signal to cover control-means 9M, it shifts to Step S540. On the other hand, when it judges with not carrying out release processing at Step S518, it shifts to S540.

[0056] At Step S522, after judging whether TELL-NO is "3" Got blocked and notifies of an effective line after a halt of the 2nd rotation reel 3, shifting to Step S524 if it judges [notifying and], and outputting lighting instructions of lamp 41f to 9 Ns of ramp-control meanses, it shifts to Step S526. On the other hand, when it judges [not notifying at Step S522 and], it shifts to Step S526.

[0057] At Step S526, when OPEN-NO is "3" Got blocked, it is judged whether it is canceling a cover position after a halt of the 2nd rotation reel 3 (it is made visible) and it judges with canceling, after shifting to Step S528 and outputting a release signal to cover control-means 9M, it shifts to Step S540. On the other hand, when it

judges with not carrying out release processing at Step S522, it shifts to S540.
[0058] At Step S530, after judging whether TELL-NO is "4" Got blocked and notifies of an effective line after a halt of the 3rd rotation reel 4, shifting to Step S532 if it judges [notifying and], and outputting lighting instructions of lamp 41f to 9 Ns of ramp-control meanses, it shifts to Step S534. On the other hand, when it judges [not notifying at Step S530 and], it shifts to Step S534.
[0059] At Step S534, when OPEN-NO is "4" Got blocked, it is judged whether it is canceling cover of a cover position after a halt of the 3rd rotation reel 4 (it is made visible) and it judges with canceling cover, after shifting to Step S536 and outputting a release signal to cover control-means 9M, it shifts to Step S540. On the other hand, when it judges with not carrying out release processing at Step S530, it shifts to S540.
[0060] At Step S540, when it is judged whether all the rotation reels 2, 3, and 4 stopped and it judges with whether three rotation reels 2, 3, and 4 would be in the idle state altogether, it shifts to Step S542. On the other hand, when at least one of three rotation reels 2, 3, and 4 is rotating, it shifts to Step S502. At Step S542, it is judged whether it is ON, and if a hit flag is not ON, it will shift to Step S560. When it judges with on the other hand having judged and canceled whether it shifted to Step S544 and cover has canceled when a hit flag judges with ON, it shifts to Step S560. When it judges with cover having canceled and on the other hand there being nothing (OPEN-NO=0), it shifts to Step S546.
[0061] At Step S546, while L6 line had turned into an effective line, when it judges with the pattern of right grant being located in a line with this L six-line position, it shifts to Step S548, otherwise, it shifts to Step S560. At Step S548, a release signal is outputted to cover control-means 9M, and it shifts to Step S560.
[0062] At Step S560, an active signal is outputted to an expenditure control section, and processing is ended. next, the 1st -- processing of halt control-section 9Hb is explained As shown in drawing 12 , a hit flag judges whether it is ON, first, in Step S600, when a hit flag is ON, it shifts to Step S610, and a hit flag shifts to Step S620, when OFF, i.e., a blank flag, is ON. At Step S610, processing of the hit halt processing section is performed and it returns. On the other hand, at Step S620, processing of the blank halt processing section is performed and it returns.
[0063] Processing of the hit halt processing section is explained referring to drawing 12 . First, after judging the contents (pattern image) of the pattern group which can be drawn in a display window 8 based on the signal from the position detection sensors 10, 11, and 12 which detect the rotation position of the rotation reels 2, 3, and 4 which correspond in Step S700, in Step S702, it judges whether the pattern corresponding to a pattern signal is in the judged pattern group. When it judges with there being a corresponding pattern, it shifts to Step S710. When it judges with on the other hand there being no corresponding pattern (i.e., when it judges with the ability of the pattern corresponding to the pattern signal not to be drawn), it shifts to Step S720.

[0064] At Step S710, it returns, after outputting to roll control meanses 9J, 9K, and 9L to drive the motors 5, 6, and 7 of the rotation reels 2, 3, and 4 which correspond the drive instructions for displaying the pattern corresponding to a pattern signal on a display window 8 (drawing-in control), based on the signal from the position detection sensors 10, 11, and 12 which detect the rotation position of the corresponding rotation reels 2, 3, and 4.
[0065] Here, about a halt of the rotation reels 2, 3, and 4 matched with the stop button pushed on the 3rd, it is controlled so that the pattern corresponding to the effective right grant line top by which the corresponding halt pattern in two previous rotation reels 2, 3, and 4 was stopped stops. Motors 5, 6, and 7 control the angle of rotation (rotational frequency) to a halt by the roll control meanses 9J, 9K, and 9L so that the target pattern stops by the display window 8.
[0066] On the other hand, at Step S720, it returns, after outputting to roll control meanses 9J, 9K, and 9L to drive the motors 5, 6, and 7 of the rotation reels 2, 3, and 4 which correspond drive instructions to make it stop in a suitable pattern, since the target pattern cannot be drawn. Next, it explains, referring to drawing 13 about processing of the blank processing halt section. In Step S800, it judges whether the pattern group which can be drawn in a display window 8 based on the signal from the position detection sensors 10, 11, and 12 which detect the rotation position of the corresponding rotation reels 2, 3, and 4 is judged, and the blank pattern corresponding to a pattern signal is in the judged pattern group at Step S810 continuously. When judging with the ability of the blank pattern which corresponds by the above-mentioned judgment to be drawn, subsequently, the blank pattern Moreover, if it judges with the ability of a corresponding blank pattern not to be drawn, the blank pattern which can draw other than a hit pattern is specified. It is based on a signal from the position detection sensors 10, 11, and 12 which detect the rotation position of the corresponding rotation reels 2, 3, and 4. It returns, after outputting to roll control meanses 9J, 9K, and 9L of motors 5, 6, and 7 to drive the rotation reels 2, 3, and 4 which correspond the drive instructions for [which was specified] separating and displaying a pattern on a display window 8 (drawing-in control).
[0067] Next, expenditure control-means 9P judge whether it is the combination of the pattern of specific right grant of the list of three halt patterns located in a line on a right grant line in three stopped rotation reels 2, 3, and 4, and, in the case of the combination of the pattern of specific right grant, expenditure processing of the medal according to it is performed through the expenditure machine 30. Next, with 9Ns of ramp-control meanses, control of lighting of the validation lamps 41a-41f which correspond based on the inputted instructions, and putting out lights is performed.
[0068] Moreover, in cover control-means 9M, an input of a cover signal makes a shading state the position for width 3 coma of the best stage of the glass 43 of a display window 8 (position of the right grant line L6) through the current controller

50. Moreover, if a release signal is inputted, polarization of the position for width 3 coma of the best stage of the glass 43 of a display window 8 will be changed through the current adjustment section 50, and it will consider as the Michimitsu state.
[0069] Next, operation, the operation, the effect, etc. in the pachislot machine equipped with the above-mentioned composition are explained. In the state of game standby, usually, a part for width 3 coma of the best stage of a display window 8 (position of the right grant line L6) will be in a shading state, and it is in the state where the pattern located in the back hid.
[0070] And while a game will be started and rotation operation of all the rotation reels 2, 3, and 4 will begin if the start lever 15 is operated after a game medal is thrown in, or the BET buttons 24 and 40 are pushed and an effective line is chosen, the random number for hit determination is acquired and it judges whether it is a hit (right grant). Then, halt control of each rotation reels 2, 3, and 4 which hit with the timing and correspond according to the result of a judgment is performed by pushing each stop button 16, 17, and 18 on a game person. At this time, it controls by a hit pattern's drawing, when it is a hit, and drawing so that the hit pattern concerned may turn into a halt pattern, if it is within the limits, and, in the case of a blank, control to which a hit pattern is not equal is performed.
[0071] If it is not MAX bed specification, although the validation lamps 41a-41e corresponding to the effective line which came into effect as usual will light up with this operation form in the case of selection of the above-mentioned effective line, in specification of a MAX bed, the judgment with the 6th effective right grant line L6 is performed by the internal lottery. And when supposing that it is effective by the lottery is determined, a notice is performed to the timing which the timing of a notice of the purport that the 6th right grant line L6 is effective was determined by the lottery, and was further determined by the lottery concerned. That is, lamp 41f of L6 does not light up at the time of a medal injection.
[0072] the [while the start lever 15 is operated and all the rotation reels 2, 3, and 4 are rotating with this operation form at this time], when a notice is performed after a halt of 3 rotation reel 4 the [since the probability that the bonus was chosen is high, while all the rotation reels 2, 3, and 4 concerned are rotating] -- the hope of a bonus will be given to a game person when a notice is performed after a halt of 3 rotation reel 4
[0073] Moreover, although it is in the same state as the display of vertical 3 coma x width 3 coma in the normal state since a part for the best step of a display window 8 is covered as shown in drawing 15 , cover is canceled to the timing determined by the lottery, and it is changed into the display state of vertical 4 coma x width 3 coma. With this operation form, since cover is canceled at the time of bonus selection, the hope of a bonus will be given to a game person by cover being canceled.
[0074] Moreover, since cover is always canceled when a start lever is operated, even if it operates the start lever 15 in the state where cover is in the release state

by the last game, it is cover being canceled with as, and having become, and as for the inside of a bonus game, a game person understands that it is among a bonus. Moreover, usually, a display becomes large and it becomes easy from the time for the inside of a bonus game to stop [of a specific pattern] (eye push).

[0075] Here, with the above-mentioned operation gestalt, although glass 43 was polarized and cover and its release (exposure) are realized as a cover means, it is not limited to this. For example, you may realize cover, its release, etc. to the vertical direction or a longitudinal direction by carrying out the shield which can cover a part of display window 8 at movement, and rotating the shield concerned to the circumference of a horizontal axis (opening and closing).

[0076] Moreover, with the above-mentioned operation form, although timing of cover is made into the operation back of the start lever 15, it is not this-limited. For example, may be made to cover at the 1st rotation reel's 2 halt back, the time of specific condition formation, etc. (bonus formation, role formation of small, etc.). Moreover, with the above-mentioned operation form, although the internal lottery has determined the timing of release of cover, it is not limited to this. For example, you may set up so that it may always cancel to the cases at the 1st rotation reel's 2 halt back, the time of specific condition formation, etc.

[0077] Moreover, since determine whether the 6th right grant line L6 is effective at the time of a MAX bed, it is got blocked with the above-mentioned operation gestalt by the lottery, an effective line determines five lines or six lines and whether the 6th right grant line L6 is effective differs Although the 6th right grant line L6 concerned determines the notice timing of the purport which is an effective line by the lottery and it is made to notify to predetermined timing, it is not limited to this. For example, although an effective line considers as five lines at the time of a MAX bed, the five lines are determined by the lottery from six right grant lines, and it may be made to turn on the lamps 41a-41e corresponding to the selected five lines to the above-mentioned notice timing.

[0078] Moreover, with the above-mentioned operation gestalt, although the lottery for the determination of an effective line and the lottery of notice timing are performed only at the time of a MAX bed, it is not limited to this. For example, even if the numbers of the effective line chosen by the game person are 1 and 2, an internal lottery may determine an effective line from from among six from medal processing section 9calcium, and medal processing section 9calcium may determine the notice of the effective line concerned by the lottery as mentioned above. Also in this case, you may determine the number of effective lines by the lottery.

[0079] Moreover, although the above-mentioned operation gestalt explains by the case where the position to cover is the horizontal single tier of the best stage, you may make it cover the position corresponding to two or more right grant lines, such as two trains of an upper case, like drawing 16 . Moreover, since the portion to cover should just serve as a direction in alignment with the right grant line, in covering along with a slanting right grant line, a position like drawing 17 turns into a

cover position.
[0080] Moreover, case [whose right grant line is / like drawing 18], it sets up so that it may cover along with the line. Moreover, although the above-mentioned operation gestalt explains the case where the position to cover is fixation to the example, it is good also considering the right grant line position to cover as adjustable. For example, when a start lever is operated, the right grant line and number which are cast for which lots and covered may be determined, and you may control to cover along with the right grant line concerned.
[0081] Moreover, the position to cover is not limited to a right grant line position. For example, along with the display position of the pattern of one rotation reels 2, 3, and 4, you may be made to cover to lengthwise. Moreover, although the equipment of display circulation is constituted and the display window 8 is made into the display with the above-mentioned operation gestalt by the group of the rotation reels 2, 3, and 4 and motors 5, 6, and 7, it is not limited to this. For example, a display may prepare the pattern display which consists of liquid crystal etc., and may constitute the equipment of a circulation display from indicating two or more patterns by circulation to this display. In this case, the equipment of two or more circulation displays may consist of one equipment.
[0082]
[Effect of the Invention] Game nature improves because the pattern which seems to have explained above through a display with the game machine of this invention from a game person changes. Even if it forms the pattern train of right grant also into the portion covered especially, it becomes possible, and game nature improves.

[Translation done.]

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2.**** shows the word which can not be translated.
3.In the drawings, any words are not translated.

DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]
[Drawing 1] It is the front view of the pachislot machine concerning the operation gestalt based on this invention.

[Drawing 2] It is the block diagram of the game control section 9 concerning the operation gestalt based on this invention.
[Drawing 3] It is the development showing an example of the pattern train concerning the operation gestalt based on this invention.
[Drawing 4] It is the conceptual diagram showing the relation of the right grant line concerning the operation gestalt based on this invention.
[Drawing 5] It is the conceptual diagram showing the effective line of five lines.
[Drawing 6] It is drawing showing processing of the medal processing section concerning the operation form based on this invention.
[Drawing 7] It is drawing showing processing of the start processing section concerning the operation form based on this invention.
[Drawing 8] It is drawing showing processing of the number determination means of effective lines concerning the operation form based on this invention.
[Drawing 9] It is drawing showing processing of the notice timing determination means concerning the operation form based on this invention.
[Drawing 10] It is drawing showing processing of the cover release timing determination means concerning the operation gestalt based on this invention.
[Drawing 11] It is drawing showing processing of the main halt control section concerning the operation gestalt based on this invention.
[Drawing 12] It is drawing explaining processing of the halt processing section concerning the operation gestalt based on this invention.
[Drawing 13] It is drawing showing processing of the hit halt processing section concerning the operation gestalt based on this invention.
[Drawing 14] It is drawing showing processing of the blank halt processing section concerning the operation gestalt based on this invention.
[Drawing 15] It is drawing showing the display window of the usual game start state concerning the operation gestalt based on this invention.
[Drawing 16] It is drawing showing example of another of the cover pattern concerning the operation gestalt based on this invention.
[Drawing 17] It is drawing showing example of another of the cover pattern concerning the operation gestalt based on this invention.
[Drawing 18] It is drawing showing example of another of the cover pattern concerning the operation gestalt based on this invention.
[Description of Notations]
1 Front Panel
2, 3, 4 rotation reel
5, 6, seven motors
8 Display Window (Display)
9 Game Control Section
9A Random-number-generation means
9B Sampling means
9C Start start means

9D Pattern train determination means
9E The number determination means of effective lines
9F Notice timing determination means
9G Cover release timing determination means
9H Halt control means
9J, 9K, 9L roll control means
9M Cover control means
9N Ramp-control means
9P Expenditure control means
10, 11, 12 position detection sensor
13 Medal Injection Section
14 Medal Detection Sensor
15 Start Lever
16, 17, 18 stop button
19 Expenditure Mouth
24 BET Switch
41a-41f lamp
42 Lamp Operation Section
43 Glass
45 Right Grant Probability Table
46 The Number Probability Table of Effective Lines
47 Effective Line Notice Timing Probability Table
48 Cover Indication Timing Probability Table
L1-L6 Right grant line

[Translation done.]

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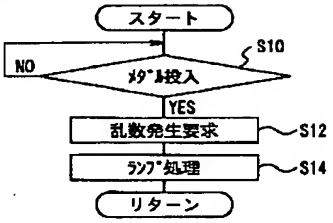
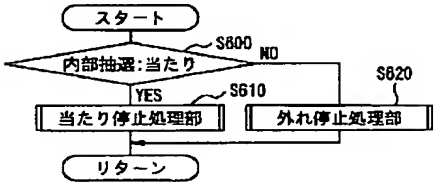
DRAWINGS

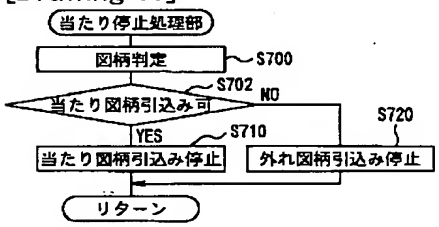
[Drawing 6]



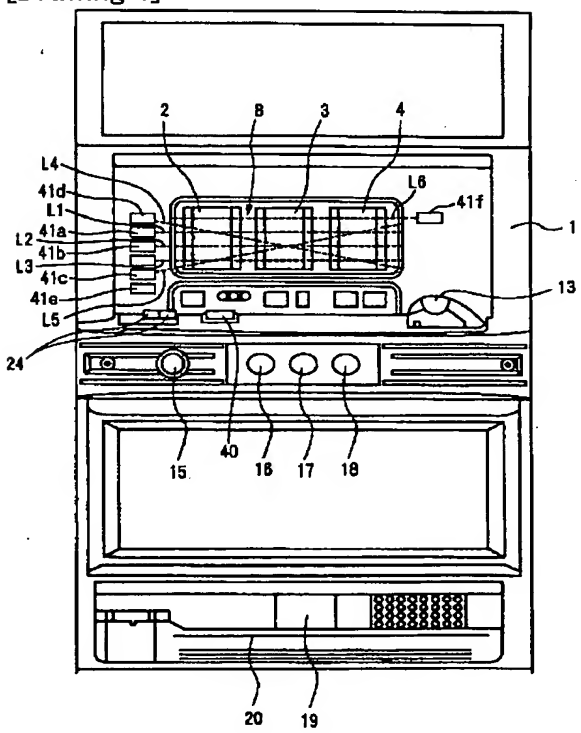
[Drawing 12]



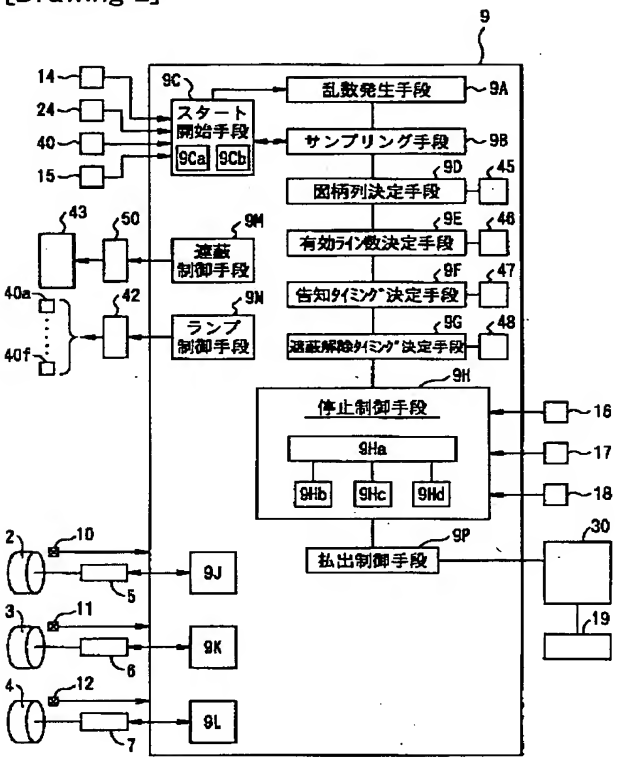
[Drawing 13]



[Drawing 1]



[Drawing 2]



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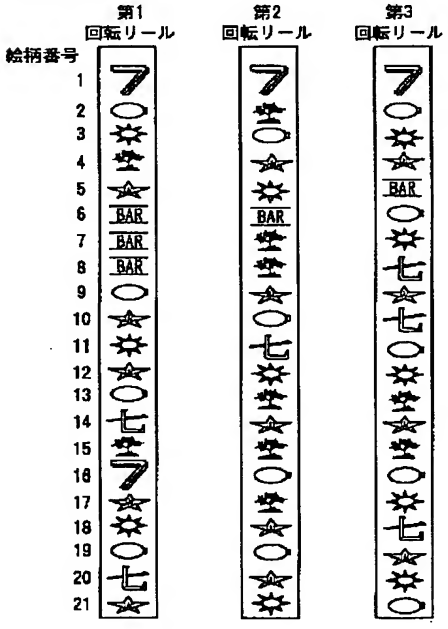
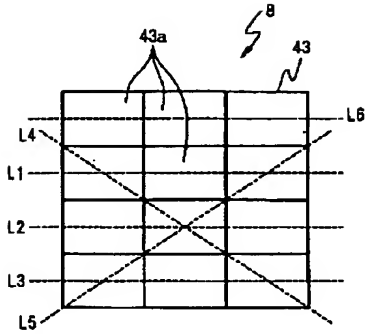
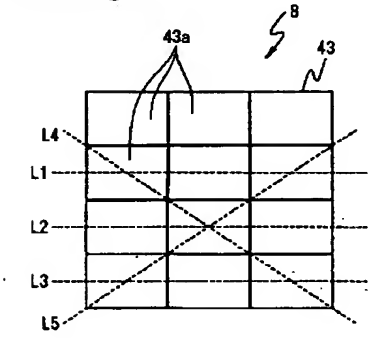


[Drawing 4]



[Drawing 5]



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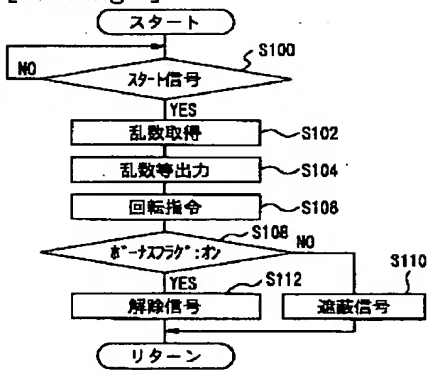
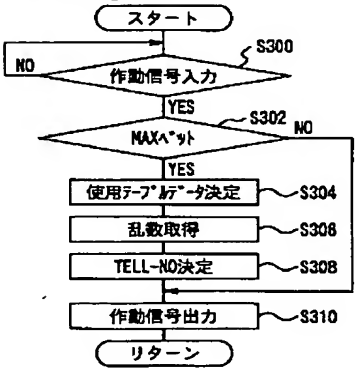


[Drawing 9]



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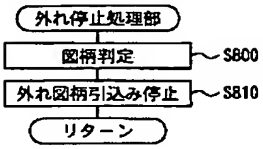
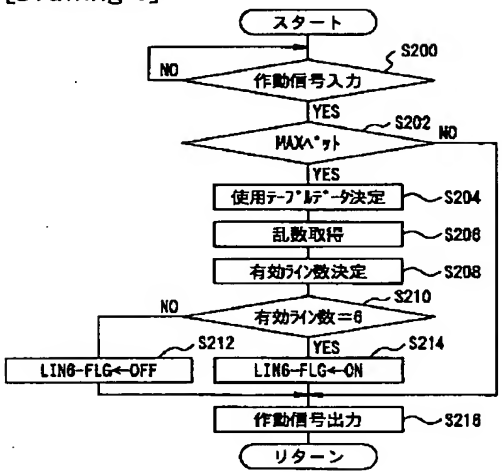
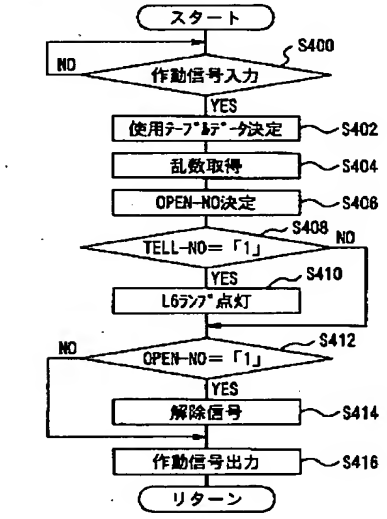


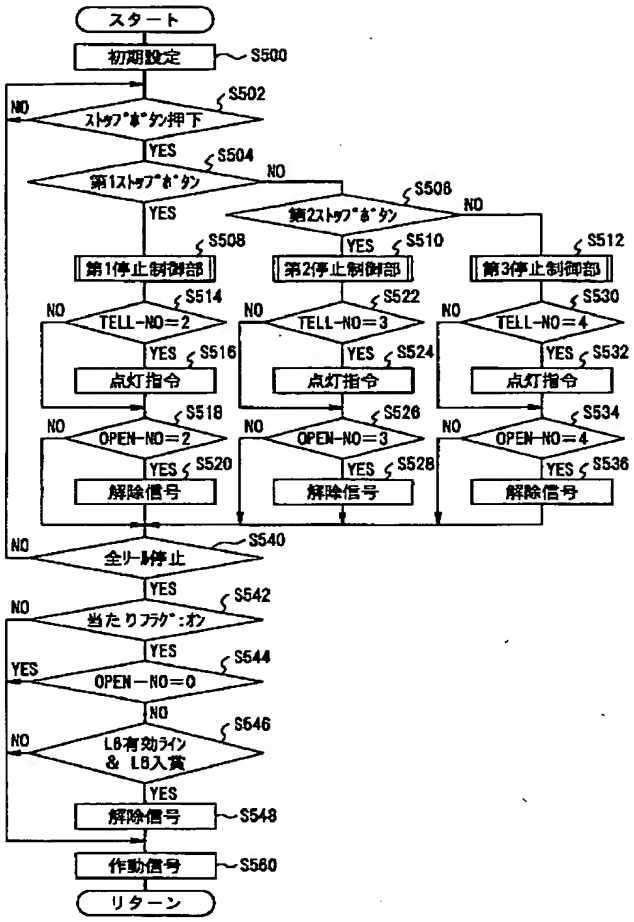
[Drawing 8]



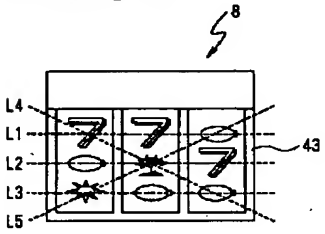
[Drawing 10]



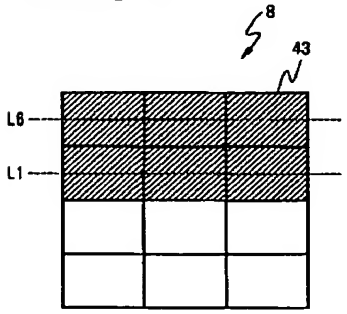
[Drawing 11]



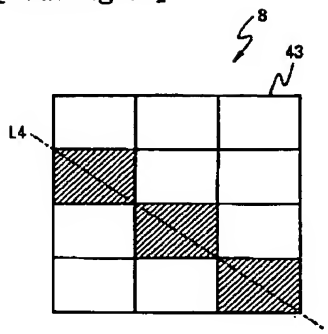
[Drawing 15]



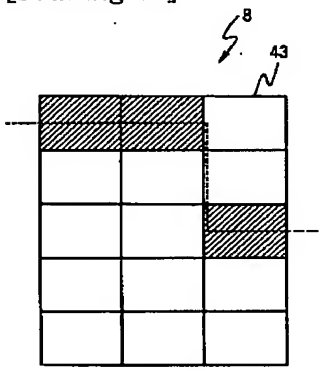
[Drawing 16]



[Drawing 17]



[Drawing 18]



[Translation done.]